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ALDCP Student Team Weekly Briefing

Final Presentation
Lauryn Anaya and Elif Deniz Oguz Erkal
August 7th, 2019

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LEONARDO Project

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What is LEONARDO?

Learning Organizations Rapid Diagnostic Tool

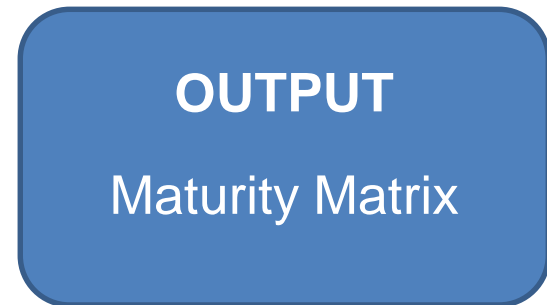
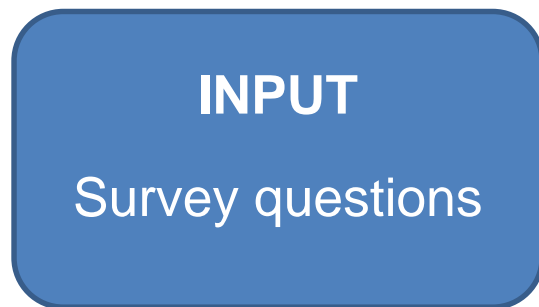
P.S. Chinowsky, K. Molenaar, A. Realph (2007)

Self assessment tool

Could be utilized in strategic planning and annual benchmarking

Shows the level of organizational learning

Uses a maturity model



Responses to survey questions are used to determine the maturity level.

Characteristics	Learning Organization Levels		
	Organization	Community	Individual
Leadership	Yellow	Yellow	Green
Processes and Infrastructure	Yellow	Yellow	Yellow
Communication	Red	Red	Yellow
Education	Yellow	Yellow	Yellow
Culture	Red	Red	Yellow

LEONARDO Project Plan

Initial Benchmarking with LEONARDO

Phase 1:

Minor revisions to the original survey ✓

Phase 2:

Administer the survey to Capital Projects ✓
Collect data for benchmarking ✓

Phase 3:

Analyze the data collected through original survey ✓

Deliverables:

- 1- LEONARDO results
- 2- Survey Results

LEONARDO survey is implemented successfully in ALDCP to benchmark current learning organization level.

(Chinowsky, Molenaar & Realph, 2007)

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Slide 5

Resultant Maturity Matrix:

Legend	
Not Started	
Partially Started	
Completed	

Characteristics	Learning Organization Levels		
	Organization	Community	Individual
Leadership			
Processes and Infrastructure			
Communication			
Education			
Culture			

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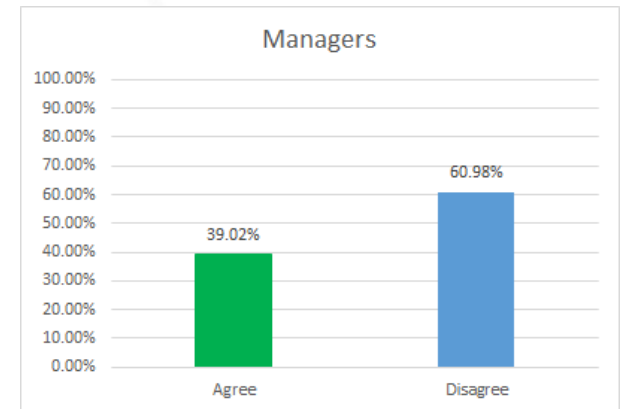
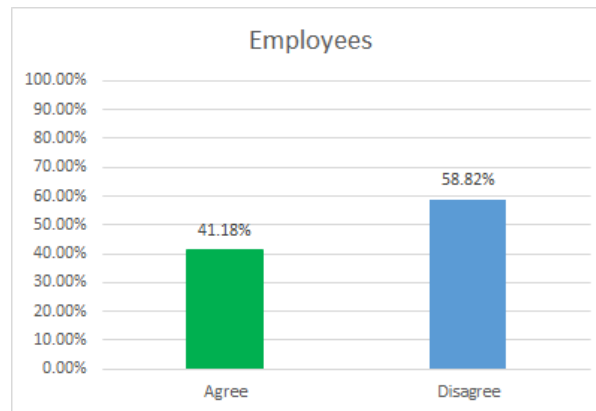
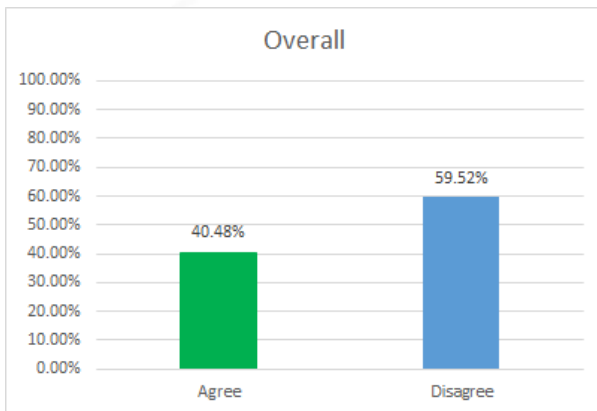
Maturity Level : Level 0

The organization is just beginning the transformation to a learning organization concept.

Although there is some activity in individual maturity cells, the transition to level 1 is still occurring.

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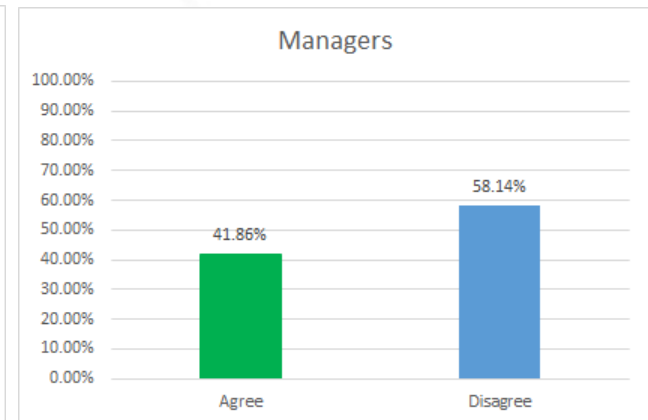
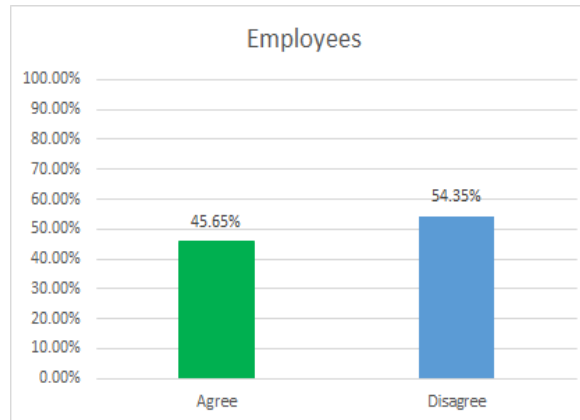
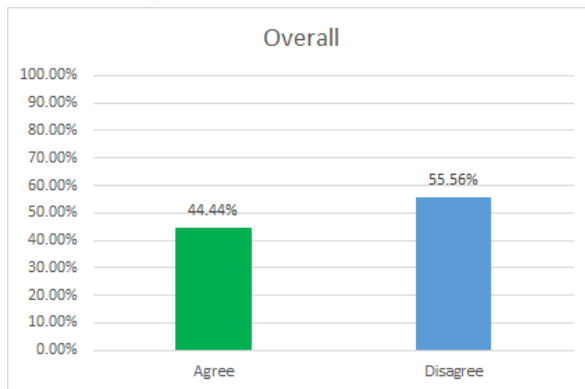
Recognition for Learning:



Groups of individuals in the organization create an environment where recognition for learning is placed an imperative for department managers within the community.
(126 responses, 85 employees, 41 managers)

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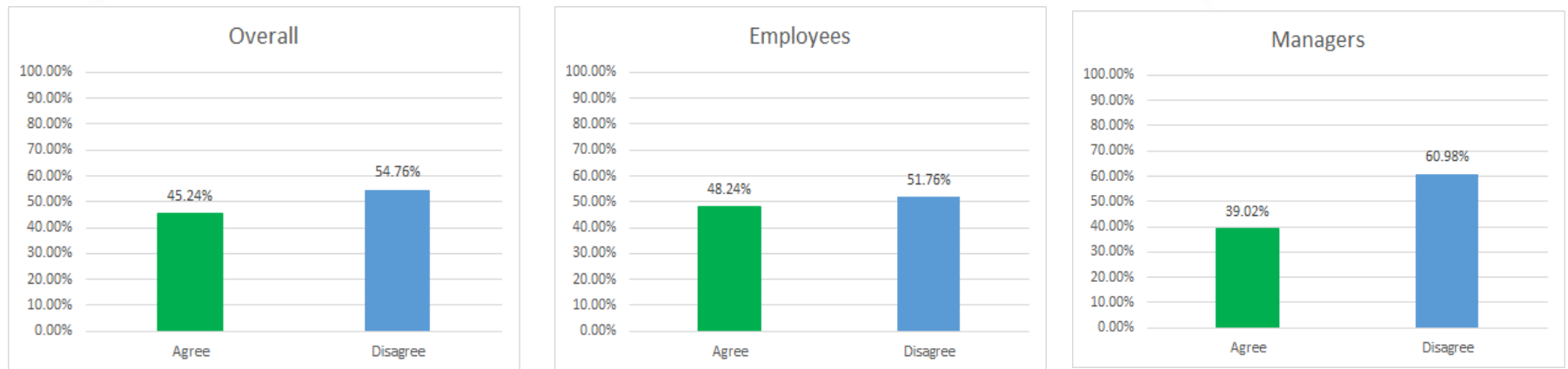
Communication Network:



Groups of individuals in the organization support the communication network by championing its use and removing barriers within the community.
(135 responses, 92 employees, 43 managers)

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Organizational Learning Culture as SOP:

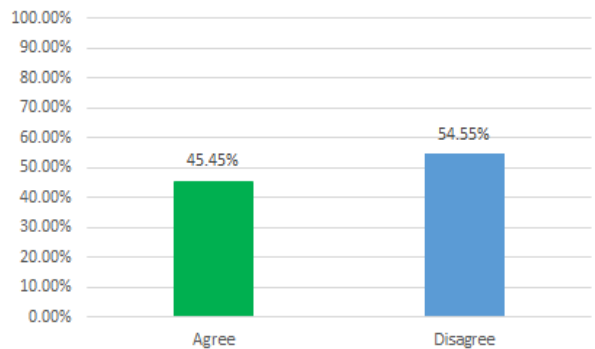


Groups of individuals in the organization create a culture that pursues a leveraging of knowledge as a standard operating procedure and as a mechanism for enhancing individual solutions.
(126 responses, 85 employees, 41 managers)

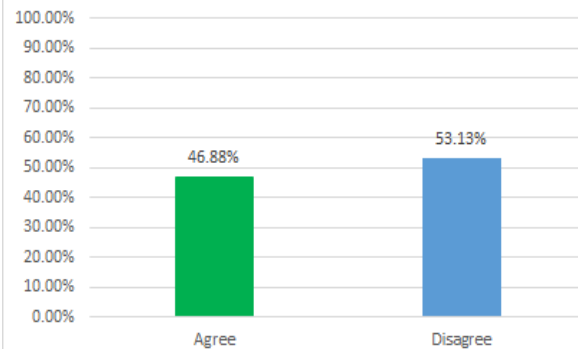
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Knowledge Management System:

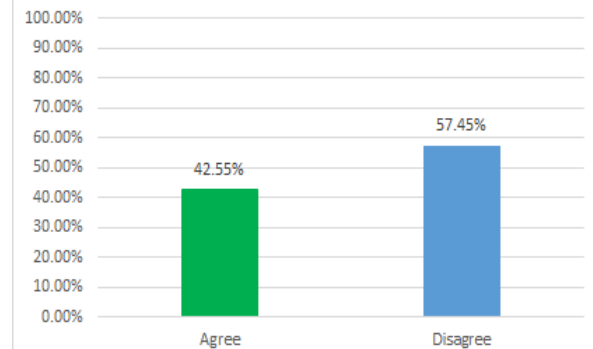
Overall



Employee



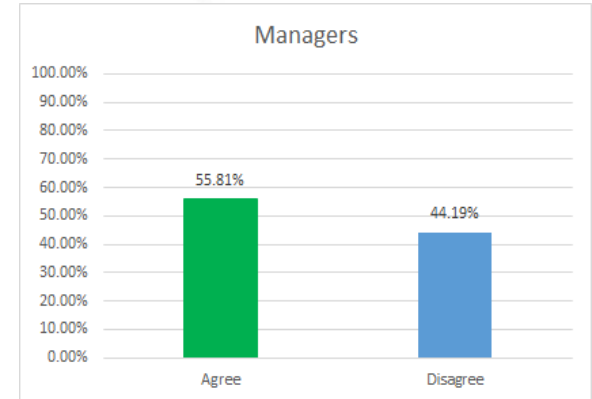
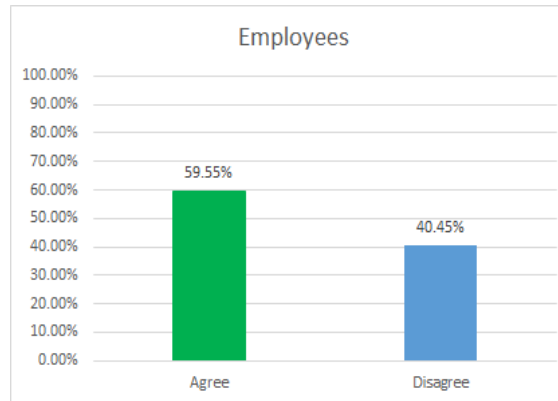
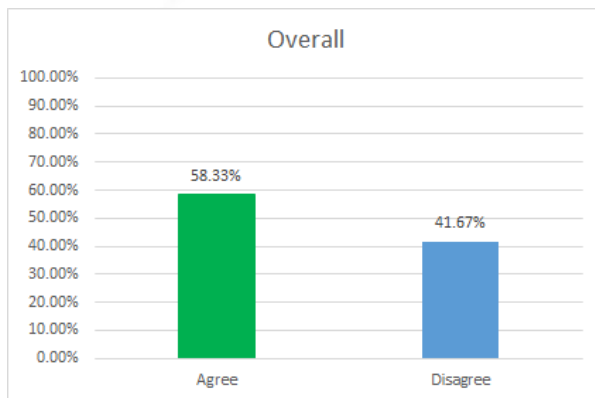
Manager



Individuals within the organization understand how the knowledge sharing infrastructure operates and how to utilize the infrastructure to enhance their project solutions.
(143 responses, 96 employees, 47 managers)

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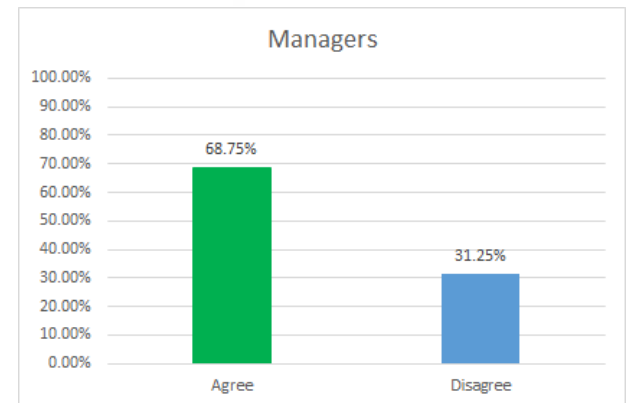
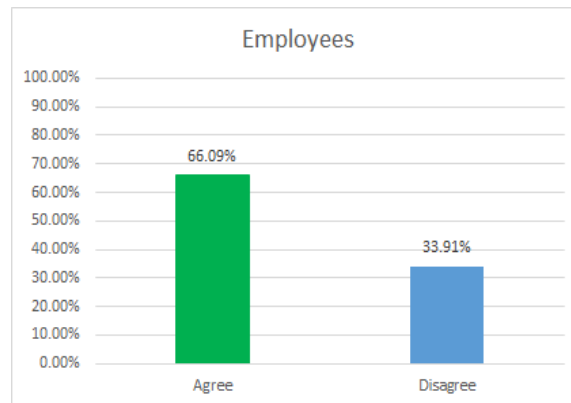
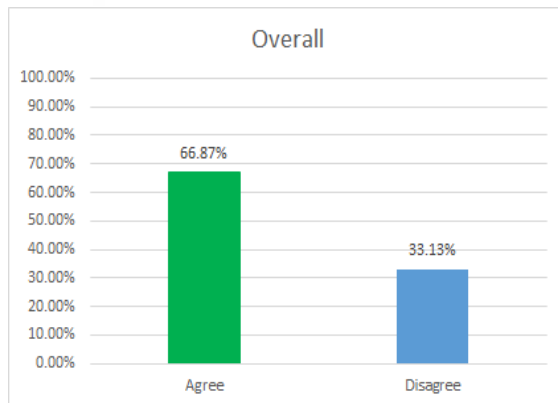
Coaching and Mentoring System:



Groups of individuals in the organization establish a coaching and mentoring system that promotes communication as a basic component of job responsibility.
(132 responses, 77 employees, 55 managers)

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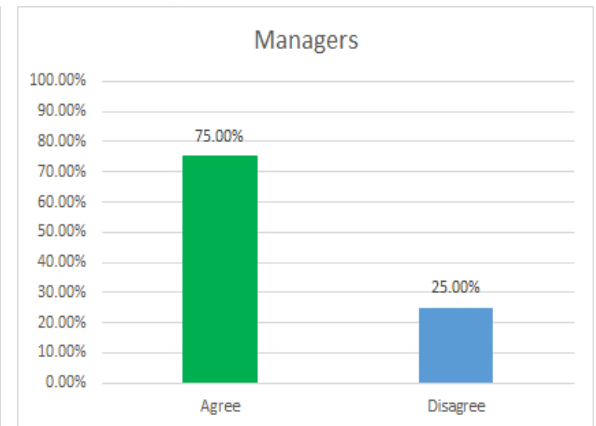
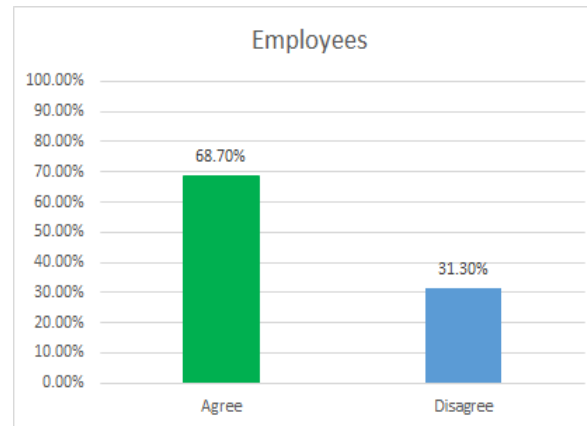
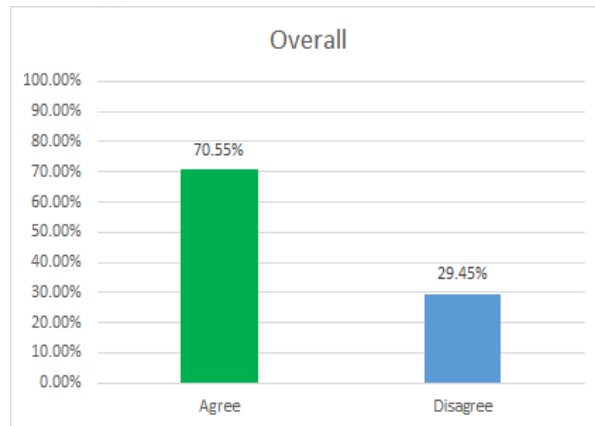
New Ideas and Sharing Ideas:



Groups of individuals within the organization champion new ideas and promote the sharing of new ideas.
(163 responses, 115 employees, 48 managers)

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Learning and Knowledge Sharing:



Individuals within the organization are accepting the role of implementing the learning organization concept by focusing on learning and knowledge sharing opportunities.
(163 responses, 115 employees, 48 managers)

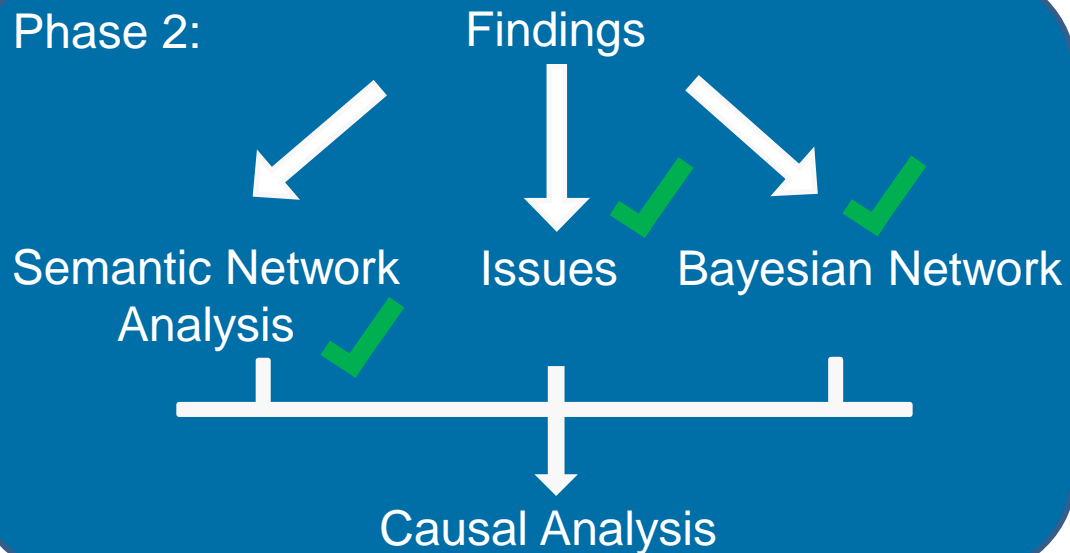
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LEONARDO Project Plan: Pilot Project

Phase 1:
Literature Review ✓
Conduct Exploratory Interviews ✓
Dissect Survey ✓

Deliverables:

- Semantic Network Analysis
- Identified Issues
- Bayesian network
- Causal Analysis plan
- Student Symposium



Pilot Project completed successfully.

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Identified Issues

- *Responsibility, Authority and Accountability*
- *Vertical Communication of Vision and Mission*
- *Lateral Communication and Silos*
- *Knowledge repositories*
- *Trust*
- *Risk-averse behavior and Innovation*
- *Know-how and Power*
- *Knowledge Management Infrastructure*
- *Prioritization*

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Responsibility, Authority and Accountability

Ambiguous expectations and responsibility allocation combined with unclear authority appointments cause accountability issues.

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Vertical Communication of Vision and Mission

Higher management is:

- **Overloaded** - putting out fires
- **Does not spend as much time on communicating a vision and mission**

The messages are either **not communicated or miscommunicated** to lower ranks.

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Lateral Communication and Silos

Due to accountability issues and **fear** created by **ambiguous responsibility allocations** and **unsupported authority**, groups fold into **silos of protection** either within projects or functional support groups.

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Knowledge repositories

Knowledge acquisition and storage occur mostly in individual level and shared through informal networks.

Informal networks are scarcely accessible to new hires and isolated silos.

Knowledge management infrastructure (technology) is underutilized

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Knowledge Management Infrastructure

Knowledge management systems are only used **for archival purposes** that are not searchable, transferred, replicated or reused in a feedback system.

Procedures and specifications are not built-in.

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Know-how and Power

Knowledge provides individuals with **gatekeeping** power over others within the informal network.

Employees **gain power** through their stored knowledge - when they don't share
= reinventing the wheel

Procedures and specifications are hard to comprehend **tacit knowledge of application** invaluable to the implementation.

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Trust

Employees are from **different** backgrounds, experience and tenure levels with **prejudiced perceptions** of each other and form isolated silos.

As there is no official **cross-mentoring system** and **clear responsibility allocations**, **adversary relationships** between different tenure groups and backgrounds emerge.

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Risk-averse behavior and Innovation

Individuals within the organization value new and good ideas, ideas get **lost quickly** within the overall implementation priorities.

There is no good mechanism to capture innovative ideas.

No official reward mechanism to encourage generation and implementation of new ideas.

Response: protect **status quo**, eliminate risk

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Prioritization

There is a collective understanding about what the vision and mission is on management level.

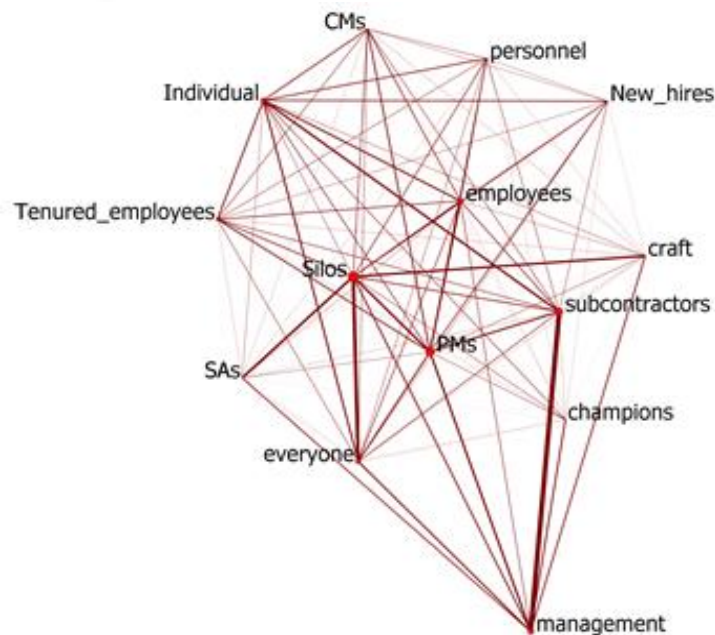
Disagreement between management about how to achieve the collective goals.

The organization is suffering from **consistency** and **prioritization issues**.

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Semantic Network Analysis

agent x agent



Knowledge agents (In-the-know)

1- *Silos*

2- *PMs*

Link Weights

Silos/Everyone

Management/SCs

Standing between two disconnected groups

1- *Employees*

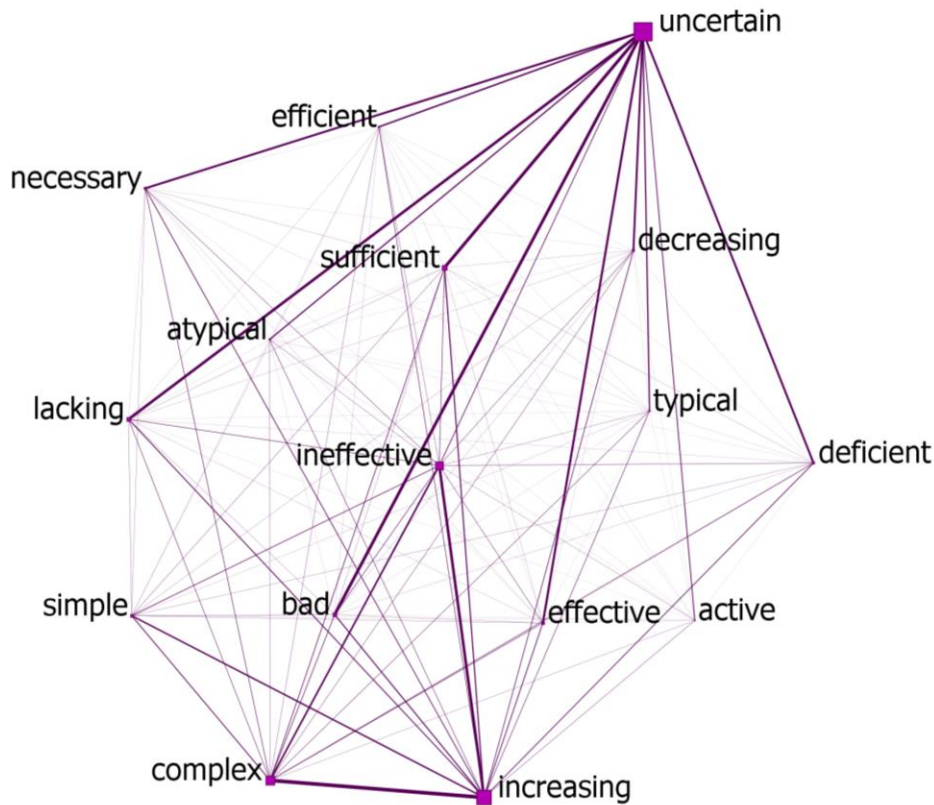
2- *craft*

3- *champions*

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Semantic Network Analysis

belief x belief



Higher centrality

1- *uncertain*

2- *increasing*

On Shortest Paths (Closeness centrality)

1- *Bad*

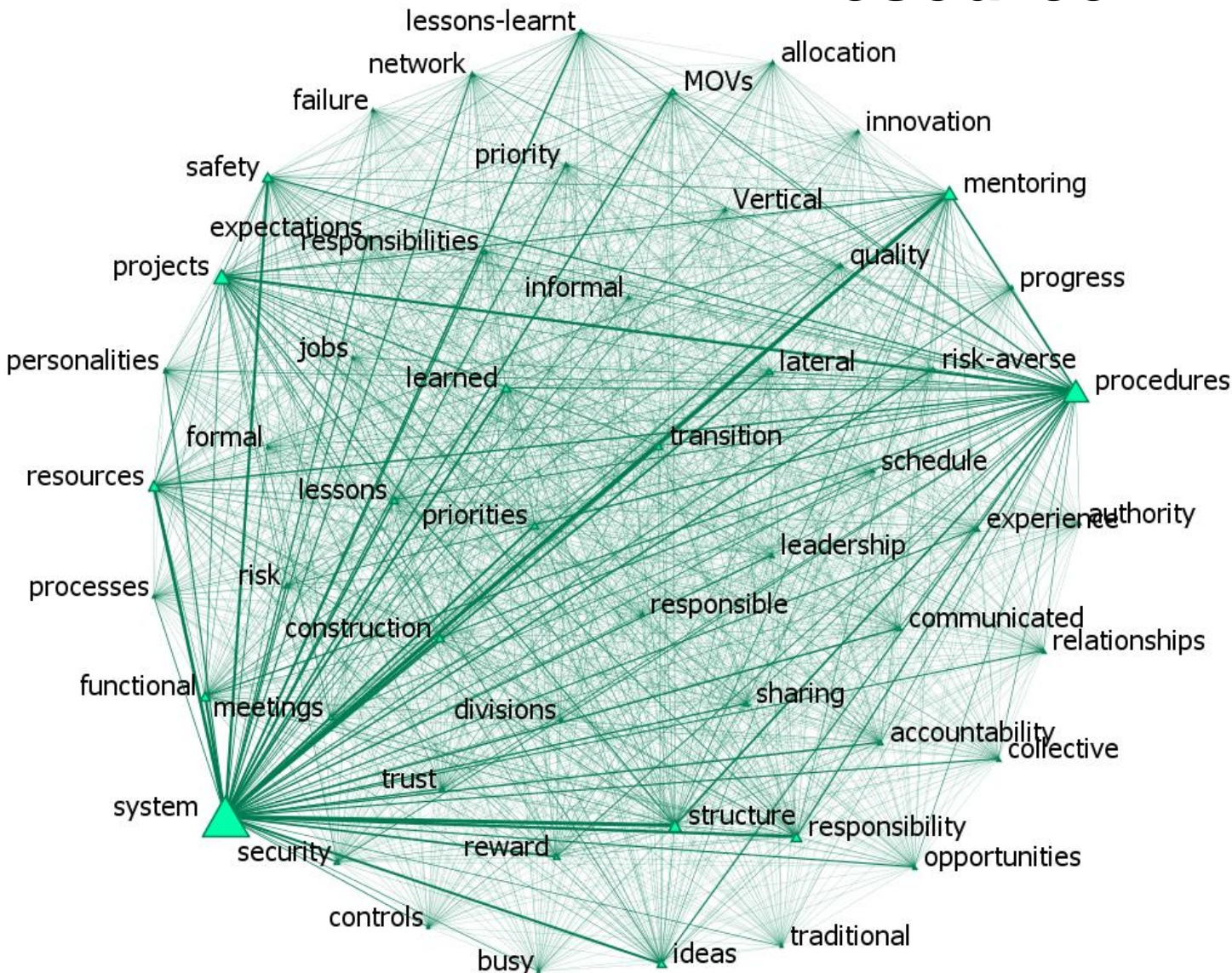
2- *Deficient*

3- *Necessary*

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Semantic Network Analysis

resource x resource



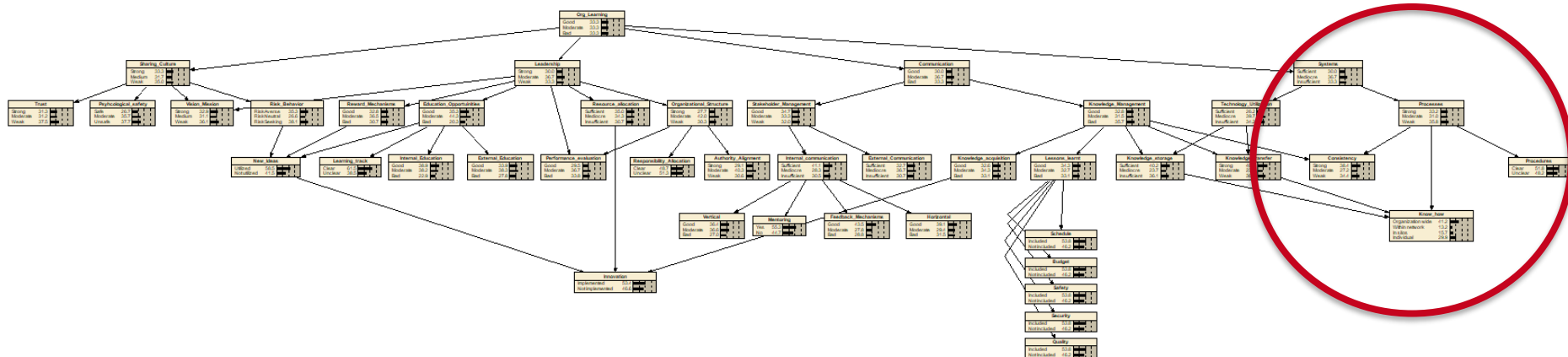
Higher centrality

- 1- system
- 2- procedures
- 3- projects
- 4- mentoring

On Shortest Paths

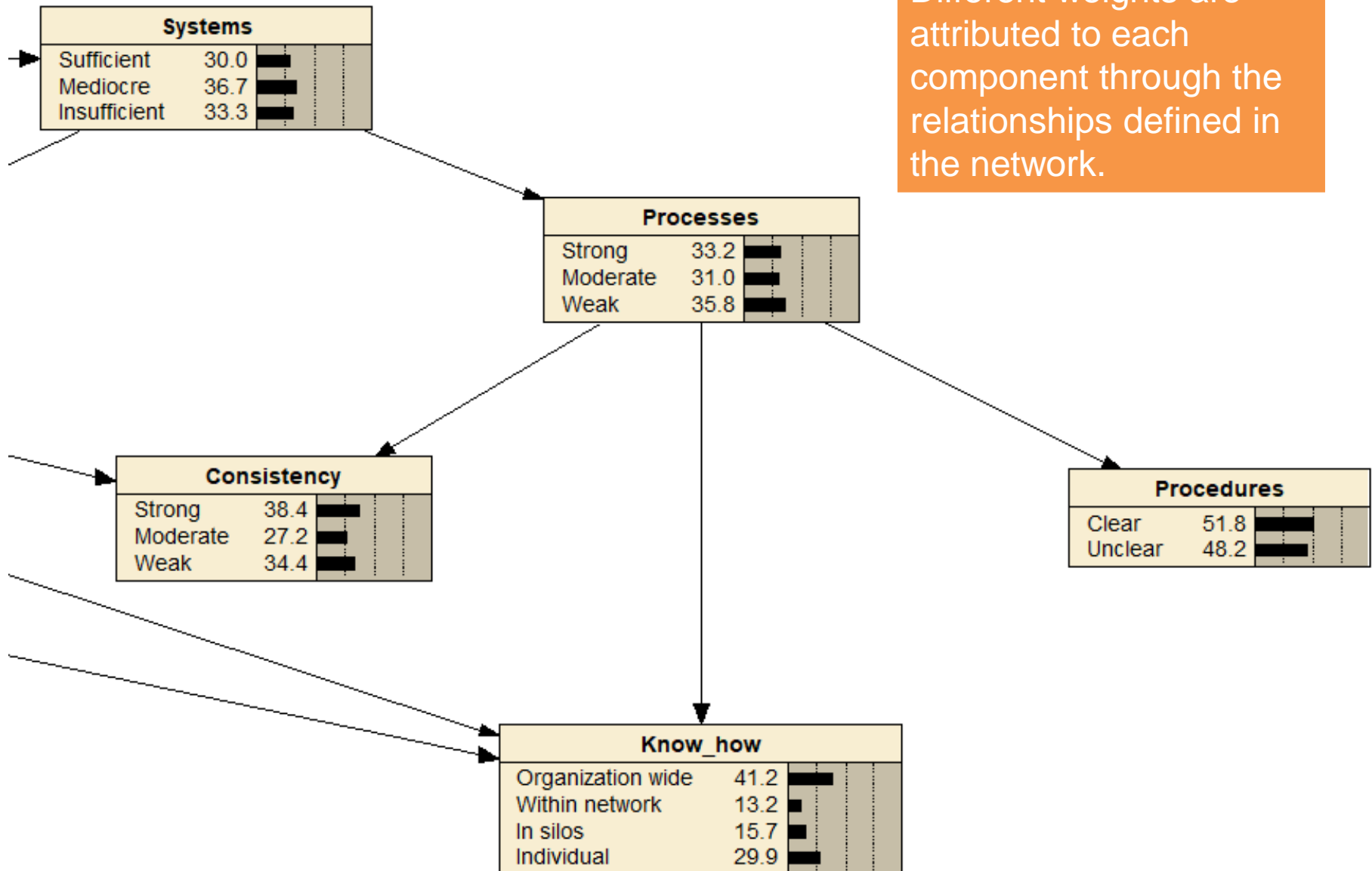
- 1- Leadership

Bayesian Network Draft



Bayesian networks are constructed to calculate the probability of achieving a learning organization.

Different weights are attributed to each component through the relationships defined in the network.



Systems		
Sufficient	63.4	<div><div></div></div>
Mediocre	32.4	<div><div></div></div>
Insufficient	4.20	<div><div></div></div>

Processes		
Strong	77.9	<div><div></div></div>
Moderate	22.1	<div><div></div></div>
Weak	0	<div><div></div></div>

Consistency		
Strong	72.8	<div><div></div></div>
Moderate	17.8	<div><div></div></div>
Weak	9.48	<div><div></div></div>

Procedures		
Clear	100	<div><div></div></div>
Unclear	0	<div><div></div></div>

Know_how		
Organization wide	100	<div><div></div></div>
Within network	0	<div><div></div></div>
In silos	0	<div><div></div></div>
Individual	0	<div><div></div></div>

Changing weights mean different probabilities of success in parent components.

Next Steps

- Focus groups for Causal Analysis: Blue Dragon
- Organizational Learning Action Plan
- **Future Research:** Bayesian Network Study

Learning and innovation go hand in hand. The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow.

[William Pollard]

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Thank you for Listening

Questions?

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